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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/778,019

02/13/2004

Dmitri Zalmanovich Garbuzov

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EXAMINER

NGUYEN, DUNG T

ART UNIT

PAPER NUMBER

2828

MAIL DATE

DELIVERY MODE

03/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/778,019	Applicant(s) GARBUZOV ET AL.	
	Examiner DUNG T. NGUYEN	Art Unit 2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-12,15-38 and 40-109 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-12,15-38 and 40-109 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>18/21/07</u> . | 6) <input type="checkbox"/> Other: _____ |

OFFICE ACTION
Reissue Applications

The reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application. See 37 CFR 1.175(a)(1) and MPEP § 1414.

A new oath is required. The oath or declaration must properly identify at least one 35 U.S.C. 251 error being relied upon as a basis for the reissue and that it is indeed an appropriate error for reissue (37 CFR 1.175(a)(1)). For example, "failure to include the following claims in the original patent..." is not an acceptable statement of an error. See reissue guide and MPEP 1414.

Any error in the claims must be identified by reference to the specific claim(s) and the specific claim language wherein lies the error. A statement of "... failure to include a claim directed to ..." and then presenting a newly added claim, would not be considered a sufficient "error" statement since applicant has not pointed out what the other claims lacked that the newly added claim has, or vice versa. Such a statement would be no better than saying in the reissue oath or declaration that "this application is being filed to correct errors in the patent which may be noted from the change made by adding new claim." In both cases, the error has not been identified.

Therefore, claims 1, 4-12, 15-38, 40-109 are rejected.

Claim Objections

The amendment of 8/21/07 is improper. Deletions should be indicated with brackets, not strike-throughs. New claims must always be underlined and presented without brackets showing deletions. See the reissue guide.

Any change in the specification (other than (a) above) must be presented as an entire paragraph (when proposed by the applicant). The precise point in the specification must be indicated where the amended paragraph is to be located. 37 CFR 1.173(b)(1). All subject matter being added to the patent must be underlined. All subject matter being deleted from the patent must be placed between brackets. 37 CFR 1.173(d). Examiner's Amendment exceptions as set out in revised 37 CFR 1.121(g) apply in reissue applications. See MPEP 1455.

Appropriate correction is required.

Claims 1, 12, 22, 44, 56 are objected to because of the following informalities: The claims recite "a waveguide region which is not intentionally doped" but later recite "the

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waveguide region has a doping level of no greater than $5 \times 10^{16}/\text{cm}^3$ ". That does not make sense. Appropriate correction is required.

Claims 31-32, 54-55, 62-63, 74-75, 84-85, 102, and 109 are objected to because of the following informalities: Is the waveguide region thickness in meter ?. Appropriate correction is required.

Claim 46 is objected to because of the following informalities: Is there any connection between the limitations of "**a quantum well region within the waveguide region** for generating an optical mode of photons; and **a plurality of spaced quantum well regions within the waveguide region** for generating an optical mode of photons with a barrier region between each pair of adjacent quantum well regions". Appropriate correction is required.

Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (571) 272-1949. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

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Michael Dung Nguyen

Primary Examiner

/Dung (Michael) T Nguyen/
Primary Examiner, Art Unit 2828